

Contents

Letters to the Editor

Neutrino capture in $^{69, 71}$ Ga and the detection of solar and galactic neutrinos

Grotz, K., Klapdor, H.V., Metzinger, J. L1

Three micron spectroscopy of the galactic centre source IRS 7

Butchart, I., McFadzean, A.D., Whittet, D.C.B., Geballe, T.R., Greenberg, J.M. L5

1.3 mm continuum observations of compact H II regions detected by IRAS I

Chini, R., Kreysa, E., Mezger, P.G., Gemünd, H.-P. L8

First observations of circumstellar envelopes with the IRAM 30-m telescope

Lucas, R., Omont, A., Guilloteau, S., Nguyen-Q-Rieu L11

The far-infrared (IRAS) excess in HD 161796 and related stars

Parthasarathy, M., Pottasch, S.R. L15

HR 4049: The hottest proto-planetary nebula star or a run-away hypergiant at high galactic latitude surrounded by a dust cloud?

Lamers, H.J.G.L.M., Waters, L.B.F.M., Garmany, C.D., Perez, M.R., Waelkens, C. L19

A qualitative model for GX 5-1

Berman, N.M., Stollman, G.M. L22

IRAS observations of the L 1551 bipolar outflow

Clark, F.O., Laureis, R.J. L25

Detection of optical variability of LSI+61°303

Paredes, J.M., Figueras, F. L29

Prospects for observing the occultation of pulsars by Halley's comet

Strom, R.G. L32

Cosmology

(RN) Dusty voids?

Chincarini, G. 376

Search for ultraviolet emission lines from a hot gaseous halo in the edge-on galaxy NGC 4244

Deharveng, J.-M., Bixler, J., Joubert, M., Bowyer, S., Malina, R. 119

Kinematics of elliptical galaxies with minor axis dust lanes

Möllenhoff, C., Marenbach, G. 219

The optical variability of 3 C 345

Kidger, M.R., Beckman, J.E. 288

Search for the globular clusters in nearby galaxies. I. NGC 253

Blecha, A. 321

Isolated galaxies

Vettolani, G., de Souza, R., Chincarini, G. 343

Spectrophotometry of H II regions in irregular galaxies

Stasińska, G., Comte, G., Vigroux, L. 352

H II regions in M 33. III. Physical properties

Viallefond, F., Goss, W.M. 357

(RN) Far-infrared emission from clumpy irregular galaxies

Klein, U., Heidmann, J., Wielebinski, R., Wunderlich, E. 373

Galactic structure and dynamics

The radial distribution of galactic gamma rays. III.

The distribution of cosmic rays in the Galaxy and the CO-H₂ calibration

Bloemen, J.B.G.M., Strong, A.W., Blitz, L., Cohen, R.S., Dame, T.M., Grabelsky, D.A., Hermsen, W., Lebrun, F., Mayer-Hasselwander, H.A., Thaddeus, P. 25

Submillimetric photometry of the integrated galactic emission

Pajot, F., Gispert, R., Lamarre, J.M., Peyrusse, R., Puget, J.L., Serra, G., Coron, N., Dambier, G., Leblanc, J., Moalic, J.P., Renault, J.C., Vitry, R. 55

Finite length-scale anti-gravity and observations of mass discrepancies in galaxies

Sanders, R.H. 135

Galaxy and star counts in Taurus and Perseus

Lebrun, F., Grenier, I. 181

Stellar clusters and associations

Star formation in the Wing of the Small Magellanic Cloud

Pierre, M., Viton, M., Sivan, J.P., Courtès, G. 249

CCD photo-polarimetry of the jet of 3C 273

Röser, H.-J., Meisenheimer, K. 15

Electronographic BV photometry of three distant clusters of galaxies. I. Observations and reduction techniques

Le Févre, O., Bijaoui, A., Mathez, G., Picat, J.P., Lelièvre, G. 92

| | |
|--|-----|
| Formation, structure and evolution of stars | |
| Evolution of white dwarfs | |
| Koester, D., Schönberner, D. | 125 |
| Spectrophotometry of the eclipsing dwarf nova V 2051 Ophiuchi | |
| Watts, D.J., Bailey, J., Hill, P.W., Greenhill, J.G., McCowage, C., Carty, T. | 197 |
| Boundary layer theory and its application to Algol systems: a model for the pseudo-photosphere stars | |
| Shore, S.N., King, A.R. | 263 |
| Hayashi limits for carbon stars and the onset of dust-driven winds | |
| Lucy, L.B., Robertson, J.A., Sharp, C.M. | 267 |
| VBLUW photometry of two hypergiants HD 8007 (B2Ia ⁺) and HD 74180 (F2Ia ⁺) and of the open cluster Pismis 11 | |
| Steemers, W.J.G., van Genderen, A.M. | 308 |
| The ultraviolet variability of the symbiotic star HBV 475. II. Study of line flux variations | |
| Mueller, B.E.A., Nussbaumer, H., Schmutz, W. | 313 |
| Stellar atmospheres | |
| Polarimetric evidence for an evolving circumstellar cloud in L ₂ Puppis | |
| Magalhães, A.M., Coyne, G.V., Codina-Landaberry, S.J., Gneidinger, C. | 1 |
| Optical light curves of massive X-ray binaries | |
| Tjemkes, S.A., Zuiderwijk, E.J., van Paradijs, J. | 77 |
| The nitrogen abundance in Wolf-Rayet WC stars | |
| Nussbaumer, H., Schmutz, W. | 100 |
| Spectral similarities in the visible and UV spectrum of Herbig Ae/Be stars | |
| Catala, C., Czarny, J., Felenbok, P., Praderie, F. | 103 |
| Multilevel line formation in the expanding envelope of ζ Aur/VV Cep systems | |
| Baade, R. | 145 |
| The flare star EV Lac. I. The activity cycle | |
| Mavridis, L.N., Avgoloupis, S. | 171 |
| Magnetic structure in cool stars. IX. Ultraviolet emission lines from chromospheres and transition regions | |
| Oranje, B.J. | 185 |
| New observational results of the LMC-S Dor variable R 127 during outburst | |
| Stahl, O., Wolf, B. | 243 |
| Search for λ Bootis type candidates | |
| Hauck, B. | 349 |
| (RN) Faint optical flares from the dwarf M star Gliese 812 (Ross 193) | |
| Doyle, J.G., Byrne, P.B. | 370 |
| (RN) Radio emission of cataclysmic variable stars | |
| Fürst, E., Benz, A., Hirth, W., Kiplinger, A., Geffert, M. | 377 |
| (RN) Spectral signatures in the soft γ-ray emission from PSR 0833-45 | |
| Salvati, M. | 379 |
| Diffuse matter in space (including HII regions and planetary nebulae) | |
| Classification of pump mechanisms for astronomical OH masers and a maser model for the H ₂ O photodissociation pump mechanism | |
| Andresen, P. | 42 |
| 22 GHz continuum and spectral index maps of the galactic center region | |
| Tatemoto, C.E., Strauss, F.M., Abraham, Z. | 176 |
| Lynds 379: a new source of bipolar molecular flow | |
| Hilton, J., White, G.J., Cronin, N., Rainey, R. | 274 |
| Relative rôles of type I and II supernovae in the chemical enrichment of the interstellar gas | |
| Matteucci, F., Greggio, L. | 279 |
| Warm dust in the R CrA molecular cloud | |
| Leene, A. | 295 |
| G 179.0+2.7, an unusual galactic radio source? | |
| Fürst, E., Reich, W. | 303 |
| Interstellar molecular carbon in distant supergiants | |
| Gredel, R., Münch, G. | 336 |
| The Sun | |
| Emission of Lyman α radiation by solar coronal loops. I. General synopsis | |
| Gouttebroze, P., Vial, J.C., Tsiroupolis, G. | 154 |
| Meridional motions of sunspots from 1947.9–1985.0. I. Latitude drift at the different solar-cycles | |
| Hanslmeier, A., Lustig, G. | 227 |
| Structure and merging of solar magnetic fluxtubes | |
| Pneuman, G.W., Solanki, S.K., Stenflo, J.O. | 231 |
| Soft X-ray observations of high-velocity features in the 29 June 1980 flares | |
| Bentley, R.D., Lemen, J.R., Phillips, K.J.H., Culhane, J.L. | 255 |
| Celestial mechanics and astrometry | |
| A collection of Galilean satellite eclipse observations, 1652–1983: Part I | |
| Lieske, J.H. | 61 |
| Physical and chemical processes | |
| The screening of photodisintegration reactions | |
| Mochkovitch, R., Nomoto, K. | 115 |
| An exact solution for a rotating selfgravitating gas mass with oscillatory density | |
| Schmitz, F., Ebert, R. | 214 |

8
7
6
5
4
3
2
1